

2811

Packet No.: WMP-SME-352

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.

By: _____

Date: May 6, 2004IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applic. No. : 10/022,605 Confirmation No.: 2348

Inventor : Klemens Ferstl et al.

Filed : December 17, 2001

Title : Multichip Module for LOC Mounting and Method for Producing the Multichip Module

TC/A.U. : 2811

Examiner : Cuong Quang Nguyen

Customer No. : 24131

Hon. Commissioner for Patents
Alexandria, VA 22313-1450

P E T I T I O N U N D E R 37 C.F.R. §1.8(b)

Hon. Commissioner for Patents
Alexandria, VA 22313-1450

Sir:

The facts leading to this petition are as follows:

Applicants received a *Notice of Abandonment* dated April 19, 2004, in the above-identified application. According to the notice, a copy of which is enclosed herewith, applicants had allegedly not responded to the Office action mailed September 12, 2003.

Applicants did indeed respond in the form of an amendment which was mailed to the Patent Office on March 11, 2004, and filed in the Patent Office on March 15, 2004. A copy of the postcard showing the filing date in the Patent Office is enclosed. The amendment bore a mailing certificate under 37 CFR §1.8, which was properly executed on that date.

Application No. 10/022,605
Petition dated 5/6/04
Reply to Notice of Abandonment, dated 04/19/04

Enclosed herewith, in accordance with Rule 8(b), is a copy of the previous mailing.

Applicants respectfully request that the *Notice of Abandonment* be rescinded and that the application be restored to pending status.

Respectfully submitted,

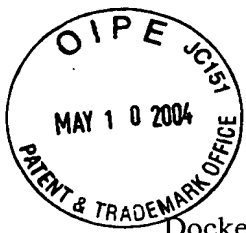


For Applicants

Date: May 6, 2004

RALPH E. LOCHER
REG. NO. 41,947

Lerner and Greenberg, P.A.
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Hollywood, FL 33022-2480
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/bb



Docket No.: WMP-SME-352

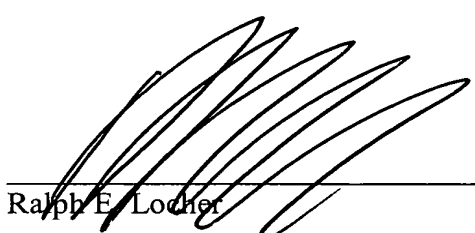
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applic. No. : 10/022,605 Confirmation No.: 2348
Inventor : Klemens Ferstl et al.
Filed : December 17, 2001
TC/A.U. : 2811
Examiner : Cuong Quang Nguyen

DECLARATION
TO ACCOMPANY PETITION UNDER 37 C.F.R. §1.8(b)

I, Ralph E. Locher, hereby declare that:

- ❖ the enclosed mailing was sent on March 11, 2004
- ❖ I personally signed the mailing certificate
- ❖ I have reviewed the pertinent pages of the outgoing mail log for March 11, 2004, and the pages show that the enclosed papers were indeed mailed on that date.



Ralph E. Locher

Date: May 6, 2004



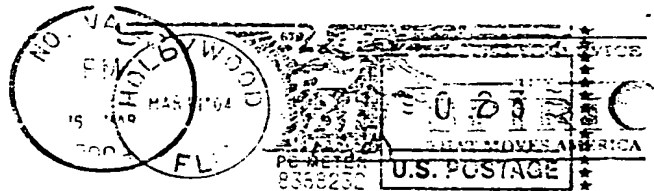
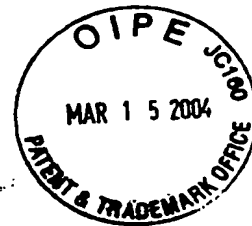
DOCKET NO. WMP-SME-352 Mailed March 11, 2004...

APPLIC. NO. 10/022,605 Express Mail

Stamp of the Patent Office hereon may be considered the date on which papers indicated below were received.

Applic pgs ... Rule 53b New ☐ Contin ☐ Div ☐ CIP ☐ / Rule 53c Prov. ☐ / Rule 53d CPA ... RCE ☐
☐ CIP ... pgs ☐ Design ☐ ... Dwgs ☐ Declaration ☒ Mailing Certif.
☐ Priority Claim ☐ Cert. Prior. Doc(s) ☐ PCT Cover Sheet WO
☒ Amend pgs 10 ☐ Prel. Amend pgs ... ☐ Letter
☐ Response pgs ... ☐ 37CFR1.116 ☐ Not. of Appeal
☐ Brief pgs ... ☐ Appndx pgs ... ☐ I.D.S. + ... Refs.
☐ Assoc Pwr of Atty ☒ Credit Card \$ 950.00
☒ Pet. for Ext 3 Mo. ☐ Pet. ☐ Check \$
☐ Issue Fee ☐ Assignment ☐ PTOL
☐ Cert. Trans. ☐ Cert. of Corr. ☐ File rec. corr

(Patent Office. Please stamp and return to addressee on reverse side.)

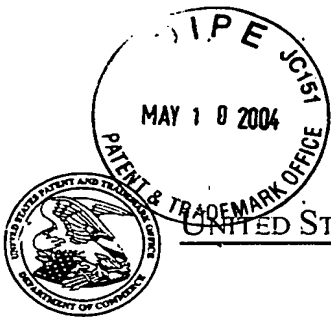


LERNER AND GREENBERG, P.A.
P.O. Box 2480
Hollywood, FL 33022-2480



DOCKET NO.	INVENTOR	Amend (No. of Pgs.)	Amend 1.116 (No. of Pgs.)	Appeal	Application (No. of Pgs.)	Application Data Sheet	Assignment	Brief	Cert. Correction	CIP	Claim for Priority	Declaration	Divisional	Express	Electronic Filing	Fil. Rcpt. Correct.	Formal Drawings (No.)	IDS (No. of Refs.)	Inf. Drawings (No.)	Issue Fees	Letter	Letter Draftsman	Maintenance Fee	PCT Cover Sheet	Petition for Ext.	(Ass.) Power of Attorney	Priority Document	RCE	Response	Trademark Application	1533	\$ Amount	\$ Amount	Credit Card	Check	Addit. Info.
11-Mar-04																																				
Z&P/IN/08226	Engelhardt																																			85B, Pub. Fee, 1595
2000P1188	Aligner																																			85B, Pub. Fee, 1595
MOH-P010126	Gradel																																		85B, Pub. Fee, 1595	
GR98P1657	Zoernack																																		85B, 1595	
L&L-10111	Hurt																																		85B, Pub. Fee, 1595	
WMP-SME-352	Ferstl																																			
GR98P1381	Henniger																																		1449	
L&L-10078	Kersch																																		1449	
TER-01P0007	Weiner																																		1449	
A-3843	Gerstenberger																																		1449, ESR	
DSC-002	SCALAR																																		TM - Decl., PoA, German Reg	
DSC-001	SCALARE																																		TM - Decl., PoA, German Reg	
GR98P1974	Hoffmann																																			
WTH-54151-25	Battlogg																																			
P2001.0356	Seidel																																			
P2001.0378	Depla																																			
P2002.1029	Haute																																			
MP-Nr. 00/586	Schollenberger																																			Pub. Fee





UNITED STATES PATENT AND TRADEMARK OFFICE

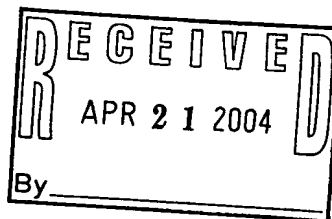
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022.605	12/17/2001	Klemens Ferstl	WMP-SME-352	2348
24131	7590	04/19/2004	EXAMINER	
LERNER AND GREENBERG, PA P O BOX 2480 HOLLYWOOD, FL 33022-2480			NGUYEN, CUONG QUANG	
			ART UNIT	PAPER NUMBER

2811

DATE MAILED: 04/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.





Notice of Abandonment

Application No.

10/022,605

Applicant(s)

FERSTL ET AL.

Examiner

Cuong Q Nguyen

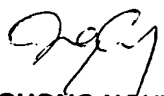
Art Unit

2811

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

This application is abandoned in view of:

1. ☒ Applicant's failure to timely file a proper reply to the Office letter mailed on 12 September 2003.
 - (a) ☐ A reply was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply (including a total extension of time of _____ month(s)) which expired on _____.
 - (b) ☐ A proposed reply was received on _____, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection.
(A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).
 - (c) ☐ A reply was received on _____ but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).
 - (d) ☒ No reply has been received.
2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).
 - (a) ☐ The issue fee and publication fee, if applicable, was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).
 - (b) ☐ The submitted fee of \$_____ is insufficient. A balance of \$_____ is due.
The issue fee required by 37 CFR 1.18 is \$_____. The publication fee, if required by 37 CFR 1.18(d), is \$_____.
 - (c) ☐ The issue fee and publication fee, if applicable, has not been received.
3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).
 - (a) ☐ Proposed corrected drawings were received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply.
 - (b) ☐ No corrected drawings have been received.
4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.
5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.
6. ☐ The decision by the Board of Patent Appeals and Interference rendered on _____ and because the period for seeking court review of the decision has expired and there are no allowed claims.
7. ☐ The reason(s) below:


CUONG NGUYEN
PRIMARY EXAMINER

Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.

CERTIFICATION OF MAILING

I hereby certify that this correspondence for Serial No. 10/022,605 is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, Va. 22313-1450

By: _____

Date: March 11, 2004IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applic. No. : 10/022,605 Confirmation No.: 2348
Applicant : Klemens Ferstl, et al.
Filed : December 17, 2001
Art Unit : 2811
Examiner : Cuong Qunag Nguyen
Title : Multichip Module for LOC Mounting and
Method for Producing the Multichip Module
Docket No. : WMP-SME-352
Customer No. : 24131

R E S P O N S E T O O F F I C E A C T I O N
A M E N D M E N T

Mail Stop Non Fee Amendment
Hon. Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

S i r :

Responsive to the Office Action dated September 12, 2003
kindly amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of
claims which begins on page 3 of this paper.

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Amdt. Dated March 11, 2004
Reply to Office Action of September 12, 2003

Remarks/Arguments begin on page 8 of this paper.

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. A multichip module for leads-on-chip mounting, comprising:

a lead-frame having a number of leads protruding laterally into said lead-frame and said leads having free ends;

a common, contiguous part of a wafer slice disposed in said lead-frame; ~~and~~

a number of semiconductor chips disposed next to one another in said lead-frame, ~~and~~ at least some of said semiconductor chips disposed in said lead-frame disposed on said common, contiguous part of said wafer slice, said semiconductor chips each having an upper side and bonding pads disposed on said upper side;

a fastening device for fastening said free ends of said leads protruding into said lead-frame, said fastening device

disposed on said upper side of individual ones of said
semiconductor chips; and

bonding connections electrically connecting said leads to
corresponding ones of said bonding pads;

said free ends of said leads having selected parts fastened
to said upper side of at least two of said semiconductor
chips and electrically connected to said bonding pads of said
at least two of said semiconductor chips.

2 (original). The multichip module according claim 1,
wherein said lead-frame has a lateral contour, and said
common, contiguous part of said wafer slice has a lateral
contour adapted to said lateral contour of said lead-frame.

3 (original). The multichip module according to claim 2,
wherein said lateral contour of said common, contiguous part
of said wafer slice with said semiconductor chips and said
lateral contour of said lead-frame are at a substantially
constant distance from one another all away around.

4 (original). The multichip module according to claim 2,
wherein said lateral contour of at least one of said lead-
frame and of said common, contiguous part of said wafer slice

has a shape selected from the group consisting of rectangular shapes and square shapes.

5 (original). The multichip module according to claim 1, wherein said number of said semiconductor chips disposed on said common, contiguous part of said wafer slice is $2n$, where n is equal to a natural number greater than or equal to 1.

6 (canceled).

7 (currently amended). The multichip module according to claim 1 6, wherein said fastening device is formed of carrier tapes disposed between said upper side of said semiconductor chips and an underside of said free ends of said leads.

8 (canceled).

9 (currently amended). The multichip module according to claim 1 8, wherein said selected parts of said free ends of said leads have branches selected from the group consisting of dovetail-shaped branches and T-shaped branches, and said branches are respectively fastened to said at least two of said semiconductor chips.

10 (original). The multichip module according to claim 1, wherein said free ends of said leads are one of mirror symmetric and rotational symmetric in their placement in said lead-frame.

11 (original). The multichip module according to claim 5, wherein said number n is equal to 1.

12 (original). The multichip module according to claim 5, wherein n is equal to 2.

13 (original). The multichip module according to claim 5, wherein n is equal to 3.

14 (original). The multichip module according to claim 5, wherein n is equal to 4.

15 (original). The multichip module according to claim 7, wherein said carrier tapes are formed from polyimide and are coated on both sides with a thermoplastic adhesive.

16 (withdrawn). A method for producing a multichip module for leads-on-chip mounting, which comprises the steps of:

Appl. No. 10/022,605

Amdt. Dated March.11, 2004

Reply to Office Action of September 12, 2003

mounting a number of semiconductor chips on a wafer slice
next to one another;

removing a part of the wafer slice having the semiconductor
chips from the wafer slice resulting in a common, contiguous
part; and

inserting the common, contiguous part in a lead-frame.

REMARKS

Reconsideration of the application is requested.

Claims 1-5, 7 and 9-16 remain in the application. Claims 1-5, 7 and 9-15 are subject to examination and claim 16 has been withdrawn from examination. Claims 1, 7 and 9 have been amended. Claims 6 and 8 have been canceled.

In item 2 on pages 2 and 3 of the above-identified Office Action, claims 1-7 and 10-14 have been rejected as being fully anticipated by U.S. Patent No. 6,246,615 to King et al. (hereinafter King) under 35 U.S.C. § 102. Claim 1 has been amended with the features of claims 6 and 8. In item 4 on page 4, applicants appreciatively acknowledge the Examiner's statement that claims 8 and 9 "would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims."

In item 3 on pages 3 and 4 of the above-identified Office Action, claim 15 has been rejected as being obviated by King in view of U.S. Patent No. 5,583,375 to Tsubosaki et al. (hereinafter Tsubosaki) under 35 U.S.C. § 103. Claim 15 depends on claim 1. Claim 1 is believed to be allowable and therefore claim 15 is also believed to be allowable.

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Amdt. Dated March 11, 2004
Reply to Office Action of September 12, 2003

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claim 1. Claim 1 is, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claim 1.

In view of the foregoing, reconsideration and allowance of claims 1-5, 7 and 9-16 are solicited.

Petition for extension is herewith made. The extension fee for response within a period of three months pursuant to Section 1.136(a) in the amount of \$950.00 in accordance with Section 1.17 is enclosed herewith.

If an extension of time is required, petition for extension is herewith made. Any extension fee associated therewith should be charged to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Please charge any other fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner

Appl. No. 10/022,605
Amdt. Dated March 11, 2004
Reply to Office Action of September 12, 2003

and Greenberg, P.A., No. 12-1099.

Respectfully submitted

For Applicants

REL:cgm

RALPH E. LOCHER
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March 11, 2004

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